

# University of Pretoria Yearbook 2017

## Radiographic imaging 186 (RAW 186)

**Qualification** Undergraduate

**Faculty** [Faculty of Health Sciences](#)

**Module credits** 19.00

**Programmes** [BRad Diagnostics](#)

**Contact time** 1 discussion class per week, 1 lecture per week, 1 seminar per week

**Language of tuition** Separate classes for Afrikaans and English

**Academic organisation** Radiography

**Period of presentation** Year

### Module content

Introduction: Discovery of X-rays, processing principles, handling of X-ray equipment. X-beam: production of X-rays, attenuation.

Properties of the radiographic image: visibility and geometric properties.

Image formation: interaction between X-rays and the human body and subject contrast.

Primary exposure factors: mAs, kVp and SID. AEC. Principles of technique charts. Image recording: darkrooms, cassettes, intensifying screens, efficiency of rare earth intensifying screens and X-ray film construction.

Control of scatter radiation: production of scatter, effect of scattered radiation on the image, beam restriction devices, grids and grid efficiency.

Geometry: focal spot size, SID, OID, X-ray beam/body part/film alignment, influence of distances and other variables on the geometric properties of the image. Introduction to digital radiography.

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